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ABSTRACT

The relationship between college costs and family income is examined, along with the debt burden incurred by students while pursuing a postsecondary education. Attention is directed to an analytical model of discretionary income, the families' current income and college costs and how these have changed over the last decade, and general empirical findings and further research that would improve current modeling efforts and data availability. Discretionary income is defined as the amount of resources that remain for a family or an individual after taxes and basic living expenses are deducted. Findings include the following: the ratio of college costs (at both public and private institutions) to parental discretionary income is slightly lower than it was in 1970; between 1970 and 1979, the increase in family discretionary income far exceeded the increase in college costs; during 1979 and-1981, college costs have grown at a much faster rate than income; college graduates with borrowing and income levels around the median will have little trouble repaying education debts; students who are unemployed, working part-time, or in low-paying jobs may have relatively high burdens in the first few years of repayment. (SW)

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DISCRETIONARY INCOME AND COLLEGE COSTS

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for the

National Commission on Student Financial Assistance

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Introduction

Tuition charges at many higher education institutions have increased dramatically in recent years. These rapid increases have produced fears that some families will be forced to limit their choice of an institution or squeezed out of college altogether. At the same time, high tuitions have increased concern that students will borrow large sums of money to finance their education and be saddled with unreasonable debt burdens upon graduation.

Clearly higher education costs more today than ever before. Yet it is not clear that tuition charges have risen faster than income in all cases. For example, between 1970 and 1981, the total charges at public universities increased by 106 percent while median family income increased by 116 percent. In private universities, on the other hand, costs rose almost 137 percent during this same period.

In authorizing the National Commission on Student Financial Assistance, the Congress recognized that increased costs might force families and students to devote more resources to meeting college expenses and/or to assume greater loan burdens than they had previously. The Commission's mandate, for example, requires a study of "The adequacy of capital to serve the postsecondary educational needs of students or their parents for credit." [Sec. 491 (c)(1)(C)] and "The impact of various levels of student borrowing, ... on the educational choices of students" [Sec. 491 (c)(1)(D)]. This paper adresses some of these concerns by analyzing the relationship between college costs and family income and by examining the debt burden incurred by students while pursuing a postsecondary education.

These issues will be addressed through an examination of the relationship between college costs and discretionary income. The paper focuses on two specific questions:

- Do college costs currently extract a larger proportion of family income than they did previously?
- Are student borrowing patterns creating financial hardships when they repay their loans?

The concept of discretionary income has many uses in student aid. As a general economic measure, it can be used to indicate family's ability to cover college costs out of current income or to predict the likely burden on students who are repaying education loans. As a program-specific measure, it is used when computing a family's expected parental contribution and, consequently, directly affects the student's award computation.

Although discretionary income is useful as a general measure, much like the Consumer Price Index is an overall indicator of price changes, it does not reveal the total picture of parental or student financial support for postsecondary education. Discretionary income will not show, for example, the level of savings or the liquidation or amortization of other assets which families may draw on to support their children's education. Despite this shortcoming, discretionary income does offer a convenient yardstick for measuring the change over time in college costs.

The next section presents a working definition of discretionary income and discusses the development of an analytical model of discretionary income. The following section focuses on families' current income and college costs and describes how these have changed over the last decade. Then data on students' future income and their capacity to repay education loans will be examined. The final section will briefly highlight the general empirical findings in light of current policy

considerations and suggest further research which would improve current modeling efforts and data availability.

Discretionary Income: Definitions and General Modeling Issues

Defining Discretionary Income -- There is no generally accepted definition of discretionary income as it applies to student aid or to general economic analysis. Pell Grants, for example, use one definition while the uniform methodology uses another (and calls it "adjusted available income"). In addition several state and private scholarship programs follow other definitions. As a basic rule discretionary income is the amount of current resources which remain for a family's or an individual's use after taxes and basic living expenses are deducted. For the purposes of this paper we will define discretionary income as:

Discretionary Income = (Total Earnings) - (Taxes)-(Basic Living Expenses)

The general components of an analytic model of discretionary income are:

- o earnings
- o taxes
- o consumption expenditures

Earnings -- In order to project future earnings for families and students, past data on earnings must be placed into an appropriate analytic form that includes as much detail as the analysis will require. For example, to project earnings for families at different earnings level it is necessary to develop an earnings profile which contains a distribution of families at different earnings levels. It is a difficult and involved task to develop earnings profiles for families and individuals with various characteristics. A brief description of the steps involved in modeling earnings follows.

The modeler's initial step when estimating an earnings profile is to identify those factors which determine income and other earnings.

These would include educational attainment, work experience, previous earnings, type of job, hours worked, geographic location, skills training and other factors. Second, the modeler must decide what relationhip these factors have with earnings and what statistical technique will be used to estimate that relationship. For example, it might make sense to assume a linear relationship and thus to rely upon multiple regression analysis. Third, before any estimation of the relationship between earnings and its likely determinants begins, the modeler must hypothesize the likelihood that there exists strong correlations, or relationships, among the determinants, themselves. This will provide a framework against which the results of the estimating procedure can be evaluated and will prevent drawing unfounded conclusions from the data. Fourth, the modeler must examine the available data sources to determine if each determinant can be specified either directly from the data or through the creation of some proxy determinants. Finally, having specified each factor, the size of any data samples and the relationship between the factors, the modeler can estimate the earnings function and compute the precision of the estimate.

Since, for this paper, we have neither the time or resources to undertake the aforementioned steps we will rely on the median earnings of families as a general indicator of earnings. So, in the following section, when we present the data on parental discretionary income and school costs we will be describing the situation of a family whose earnings are at the median of their group. This "median" family is the only one to which our conclusions will apply.

The data for our analysis of parental income comes from the Census Bureau's October Current Population Report. The Census data allows us to

look at three important categories of families -- all families, families with 18-24 year old dependents, and families with college-going 18-24 year old dependents.

For students who have incurred education debt (who will examined later) we have earnings data from a 1981 Department of Education report which estimated student's postschooling earnings and discretionary income in over twenty-five occupational categories.

Taxes. Taxes are much less complicated to model or approximate than earnings for our purposes. Since we are concerned with four sets of taxes -- federal, state, local and social security -- we can rely on annual tax data for close approximations of the tax burden on families and individuals at various earnings levels. Projections of future tax burdens however, will be tentative given recent Congressional discussions of possible tax increases and tax cut repeals.

We were able, using recent reports of the Tax Foundation, to plot the change in tax burden on the "median" family over the last decade. With this data we computed estimates of after-tax income for both families and students.

Consumption Expenditures -- Basic living expenses, or consumption expenditures, are the third part of our definition of discretionary income. Since every family or student must bear costs not directly related to their schooling, it becomes important to offset earnings by an amount equal to what they would likely spend for the basic necessities. It is, however, difficult to derive measures of individual household consumption patterns because they are so unique. Nevertheless, experts have devised ways to cluster household expenditure patterns into those which represent

low, intermediate and high standards of living. These standards have been developed using two types of information:

- o Scientific or technical judgment concerning the requirements for physical health and social well-being such as minimum daily nutritional requirements.
- o Analytical studies of the choices of good and services made by consumers such as recreation or education expenditures.

In this paper we will rely on two indicators which the College Scholarship Service (CSS) derives from the Bureau of Labor Statistics' (BLS) low standard of living and which they use for the purposes of computing financial aid. One indicator -- the Standard Maintenance Allowance (SMA) -- applies to the families of undergraduate college students. The other is for self-supporting students -- the Independent Student Allowance (ISA) -- and is the best proxy available for consumption expenditures of recent college graduates.

Families' Discretionary Income and College Costs

Table 1 shows the change in median family income, discretionary income, and college costs between 1970 and 1981. According to this table, median family income for all families increased by 118 percent and for families with dependents in college it increased by 123 percent. During the same period, discretionary income increased at a slightly faster rate, by 136 percent for families with dependents 18-24, and by 131 percent for families with dependents in college. The increase in college costs was not out of line with these changes: public institution charges rose by 106 percent and private schools increased by 126 percent.

There are, of course, different levels of cost increases for different types of institutions. As Table 6 (in Appendix) shows, during the same period, public sector costs at universities, other four-year and

Table 1

Year	Families	Median Family Income: Families with dependents 18-24	Median Family Income: Families with dependents in College	Discretionary Income: Families with dependents 18-24	Discretionary Income: Families with dependents in College	College Costs: Public All Schools	College Costs: Private All Schools	Costs as a Percent of Discretionary Income for Families with dependents -- College: Public	Costs as a Percent of Discretionary Income for Families with dependents -- College: Private
1970	8,268	9,624	12,063	2,309	4,171	1,287	2,738	30.8	65.6
1971	8,681	10,095	12,727	2,461	4,430	1,357	2,917	30.6	65.8
1972	9,276	10,900	13,392	2,919	4,798	1,458	3,038	30.4	63.3
1973	10,273	11,897	14,679	3,270	5,323	1,517	3,164	28.5	59.4
1974	11,025	12,561	16,005	3,474	5,982	1,563	3,403	26.1	56.9
1975	11,505	13,199	16,784	3,624	6,284	1,666	3,663	26.5	58.3
1976	12,199	14,171	18,384	3,503	6,587	1,790	3,886	27.2	59.0
1977	13,118	15,090	19,840	3,731	7,213	1,900	4,152	26.3	57.6
1978	14,300	16,910	21,429	4,526	7,793	2,009	4,477	25.8	57.4
1979	15,864	18,565	23,654	5,318	9,013	2,163	4,908	24.0	54.4
1980	16,963	19,851	25,293	5,493	9,416	2,372	5,466	25.2	58.0
1981	18,064	21,140	26,935	5,451	9,623	2,653	6,190	27.6	64.0
Percent Change	118%	119.6%	123.3%	136.1%	130.7%	106.1%	126.1%		

Data for 1980 and 1981 are estimated

[1]Income data from the Census Bureau's October Current Population Report which contains education-related variables. The family traditional and more comprehensive reporting of incomes is done in March of each year. The median incomes reported in October ranged from 82 to 86 percent of the median family income in March.

[2]Discretionary income equals after tax income less consumption expenditures. Total tax burden on the median family was derived from Tax Foundation data on federal, state and local and social security taxes. A marginal tax rate was computed for each year and applied to each median income in that year. Consumption expenditures are the standard maintenance allowances published annually by the College Scholarship Service for a family of four with one child in college.

[3]The National Center for Education Statistics provided the data on total student changes by type and control of institution.

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two-year institutons increased by 106 percent, 124 percent, and 121 percent, respectively. Private colleges and unviersities experienced steeper increases of 137 percent for universities, 129 percent for other four year schools, and 131 percent for two year institutions. Although there will be individual exceptions, these figures suggest that over the last decade college costs have not increased faster than discretionary income.

This does not mean that college costs have remained a fixed percentage of discretionary income. Graph 1 shows that college costs as a percentage of discretionary income have varied considerably in the last decade. According to this graph, college costs at private institutions for families with dependents in college have been as high as 65.8 percent of discretionary income and as low as 54 percent. For the same families, public institution costs have been as high as 31 percent of income and as low as 24 percent. Interestingly, in all cases, higher education costs represented a larger share of family discretionary income in 1970-1971 than it does at present. (See also Table 7, in Appendix) There is evidence, however, that this is changing.

College costs have increased sharply in recent years for all categories of families. This finding is illustrated by a further analysis of the information in Table 1 which reveals that in the last two years college costs have increased much faster than discretionary income. These percentage changes are shown in Table 2.

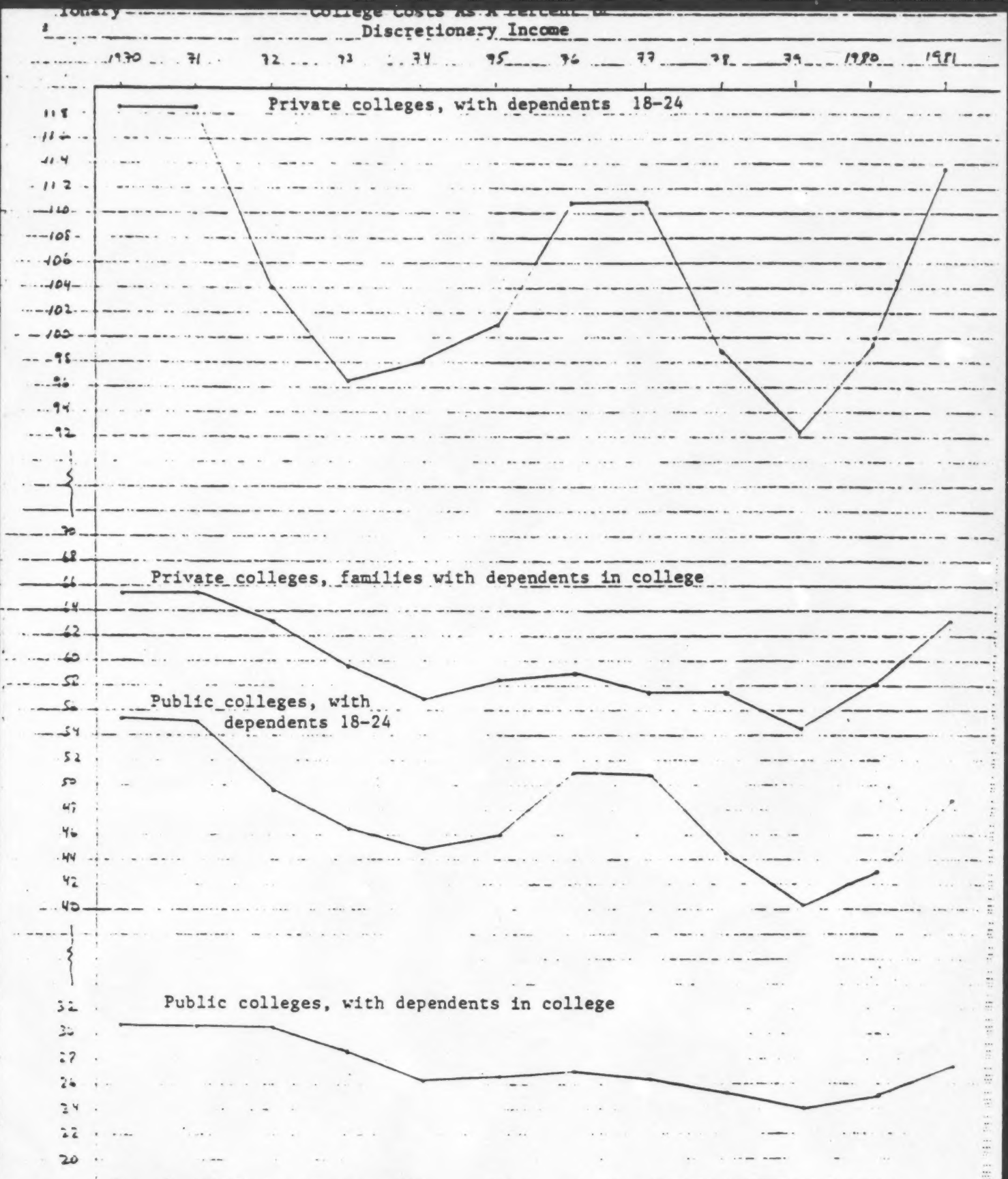
Table 2

Percent Increase in Discretionary Income
and College Costs, 1970-1981

Years	Increase in Discretionary Income		Increase in College Cost	
	Families with dependents	Families/ dependents in college	Public Institutions	Private Institutions
1970-1979	130.3%	116.1%	68.1%	79.2%
1979-1981	2.5%	6.8%	22.7%	26.1%
1970-1981	136.1%	130.7%	106.1%	126.1%

According to these data, between 1970 and 1979, college costs rose much less than discretionary income. Between 1979 and 1981, however, discretionary income rose very slowly while college costs jumped 23 percent for public institutions and 26 percent for private schools. In other words, the perception that higher education charges are increasing rapidly appears to be accurate.

If the current trends of modest income growth and steep tuition increases continue, college costs will absorb a larger share of discretionary income than they do at present. Assume, for example, that over the next five years income increases as fast as the projected growth in goods and services (the G.N.P. deflator) and that college costs increase at the rate they have for the past four years. Under these assumptions, costs relative to discretionary income would increase almost 2.0 percent at public institutions and about 10.0 percent at private colleges. These estimated changes are shown in Table 3.


Discretionary Income
1970 71 72 73 74 75 76 77 78 79 1980 1981
Private colleges, with dependents 18-24
Private colleges, families with dependents in college
Public colleges, with dependents 18-24
Public colleges, with dependents in college

See also Table ___ in Appendix

Table 3

Estimated Changes in Income and College Costs, 1981-1986

Year	Median Family Income[1]	Discretionary Income[1] Families with dependents 18 - 24	Discretionary Income[1] Families with dependents in College	College Costs[2] Public	College Costs[2] Private	College Costs as a Percent of Discretionary Income for Families with dependents in College: Public	College Costs as a Percent of Discretionary Income for Families with dependents in College: Private
1981	$18,064	$5,451	$9,623	$2,653	$6,190	27.5	64.3
1982	19,419	5,860	10,344	2,865	6,778	27.7	65.5
1983	20,836	6,288	11,100	3,094	7,422	27.9	66.9
1984	22,211	6,703	11,832	3,342	8,127	28.2	68.7
1985	23,544	7,104	12,542	3,609	8,899	28.8	71.0
1986	24,886	7,510	13,257	3,898	9,745	29.4	73.5

[1]Change in income based on Congressional Budget Office (CBO) February 1982 forecast of G.N.P. deflator. Forecast is as follows: 1982, 7.5 percent; 1983, 7.3 percent; 1984, 6.6 percent; 1985, 6.0 percent; 1986, 5.7 percent.

[2]Change in college costs based on average annual increase between 1978-1981. Change was 32 percent for public institutions (8 percent average annual increase) and 38.2 percent for private institutions (9.5 percent average annual increase.

Student Indebtedness and Discretionary Income

The most recent study of student indebtedness suggests that the average 1977 college graduate, if their borrowing and earnings patterns hover around the median, will have little financial difficulty repaying their education debt.[1] Their earnings, if they are employed full-time, are usually adequate to repay their loans while they maintain an acceptable standard of living. The study further showed that even those students who decided to make decisions to raise their consumption levels by starting a family or purchasing a home during their first few years out of school would not be financially hard pressed.

[1]Richard Wabnick, Indebtedness to Finance Postsecondary Education (Washington, D.C.: Education Policy Research Institute, October 1981).

In 1977, when the cost of public schools averaged $1,900, median borrowing for a college graduate was $2,700. The median earnings for that student during the first year after graduation was $9,500. After deducting taxes and consumption expenses, discretionary income was almost $2,000. Of this amount, $376 would be required each year to repay their student loan(s) at 7 percent over ten years, the terms for Guaranteed Student Loans (GSLs) at that time. This means that not more than one-fifth of their discretionary income was used to repay education debt. By the fifth year of repayment their annual discretionary income should exceed $7,200 and their loan burden would be 5 percent. In the final year of repayment, the loan should amount to less than 2 percent of discretionary income (see Table 4).

Table 4

1977 College Graduates' Discretionary Income and Loan Repayment
(DEBT = $2700)

Year After Graduation	Projected Total Earnings In That Year	Discretionary After Tax Earnings	Annual Repayment and Loan Burden	
			7%/10 yrs.	% burden
1	$ 9,500	$ 1,981	$376	19
5	20,600	7,201	376	5
10	45,600	22,671	376	2

This study also found two important pockets of relatively high loan burden, but these only existed during the early repayment years and appeared to be mostly a function of the traditional banking use of equal installment repayment schedules:

- All baccalaureates who work less than full-time would be hard pressed to cover their repayments during their first two or three years out of school. Also, obviously, unemployed borrowers face loan burden while they remain without a job.

- Married, full-time employed women with bachelor's degrees would be substantially burdened during the first year or two unless their spouse is also working.

Naturally debt levels as well as earnings have risen since 1977. We can tentatively suggest what has happened to loan burden levels since that time. First, we can estimate the current median debt level by inflating the 1977 figure of $2,700 by recent increases in schooling costs. Between 1977 and 1981 total charges at public and private schools has risen about 40%. Assuming a linear increase in student borrowing, the median debt for a 1981 graduate might fall around $3,800. During the same period, earnings have also risen about 40% so we might expect first-year income for college graduates to start around $13,300. With CPI increases amounting to about 33 percent during that period discretionary income of college graduates has risen by 45%. These rough estimates indicates that discretionary income has risen slightly faster than debt levels and therefore loan burden levels (allowing for the recent rise to a 9% interest rate on GSLS) have remained almost unchanged during the last four years.

Thus, although college costs have risen sharply in recent years, the <u>average</u> graduate appears unlikely to face any more pressure when repaying their loans. But what about the borrower who does not fit this middle-of-the-road description? What about students who graduate with above average debt levels or who must pay under stricter repayment terms or who live in more demanding family circumstances (more dependents and more consumption)? For example, suppose a 1981 graduate incurred a $10,000 debt while in school, as opposed to the median $3,800 debt in the previous example, and repayment was at 9 percent over ten years. This graduate's loan burden would start at about 50 percent of discretionary income in the first year but dwindle to 5 percent by the tenth year (see Table 5).

Table 5

Estimated 1981 College Graduates' Discretionary Income and Loan Repayment At Selected Debt Levels

Year Graduation	Total Earnings in that Year	Discretionary Income	Annual Repayment and Loan Burden			
			$3800 Debt		$10000 Debt	
			9%/10 yrs.	% Burden	9%/10 yrs.	% Burden
1	$13,300	$2,900	578	20	1,520	52
5	28,840	10,400	578	6	1,520	15
10	63,840	32,900	578	2	1,520	5

According to our earlier study, if 1977 graduates increased their consumption expenditures 50 percent (enough to take them from the low to the intermediate standard of living) their loan burden would double in the first year to about 40 percent of discretionary income, but increase by only about one-half in the fifth year to 10 percent, and increase only 25 percent by the tenth year of repayment to about 4 percent.

Further evidence in the study indicates that even the decision to start a family would not compete with either the higher living standard or loan repayment for most borrowers except, in some cases, during the first two or three years after graduation.

Findings, Implications and Further Research Topics

This paper has analyzed the relationship between family discretionary income and college costs and the relationship between student borrowing patterns and loan repayment schedules. The primary findings are as follows:

Family Incomes and College Costs

- The ratio of college costs (at both public and private institutions) to parental discretionary income is slightly lower than it was in 1970. During the last decade, the ratio of costs has varied considerably, but it has not exceeded its 1970 level.

- Between 1970 and 1979, the increase in family discretionary income far exceeded the increase in college costs. In the years since (1979-1981), college costs have grown at a much faster rate than income.

- If the recent pattern of steeply rising college costs and sluggish growth in personal income continues, college costs will take a two percent (public) to ten percent (private) deeper bite out of discretionary income by 1986.

Student Income and Loan Repayment

- College graduates with borrowing and income levels around the median will have little trouble repaying education debts.

- Recent college graduates are, of course, affected by broader economic conditions. Students who are unemployed, those who take low paying jobs, and those who do not work full time may have relatively high burdens in the first few years of repayment.

- Education loan repayment burden alone is unlikely to preclude or greatly inhibit future consumption expenditures.

- Changes in loan repayment terms (such as graduated repayment schedules) could do much to eliminate any early year repayment burdens. (See further research topics)

Further Research Topics

Two distinct areas of research may be pursued in more detail. One focuses on the tracking of family income and college costs. The second would analyze more recent data on student indebtedness and develop a more policy relevant model of debt burden.

Families - The analysis of family income and college costs can be expanded considerably.

- The framework of a model which tracks family income could be developed immediately. The model would produce results like Table 6 but would also have the capacity to analyze family earnings at various levels, a range of consumption expenditures and, perhaps, a more detailed distribution of college costs.

- Developing a fully operational model would as proposed above require the preparation of earnings profiles for families with dependents of college age. This can be done using available census information.

- A further, but less important, refinement of this model would be the ability to differentiate tax burden by level of earnings. This would start with an analysis of Treasury data on federal, state, local and retirement taxes.

Students - More current data on student indebtedness levels and debt burden can be prepared.

- First, the information on student indebtedness from the 1982 Survey of Recent College Graduates should be analyzed and put in the form of debt distributions for students with various age, race and employment characteristics. This survey, conducted by NCES, includes cumulative education debt data for a nationally representative sample of all four year college and university bachelor's and master's recipients. Other data sources that may have relevant information on student debt levels should be examined.

- A second step would be to calculate new profiles of the earnings of recent college graduates using census income data. The earnings profiles could then be combined with the indebtness data to permit calculation of more recent information on student debt burden.

- At the conclusion of these activities, a more policy relevant model of student indebtedness and postsecondary earnings can be prepared. This model could be used to develop alternative repayment plans for the Guaranteed Student Loan program. For example, such a model would permit preparation of a loan repayment schedule which matches repayments with likely earnings.

Table 6

Family Income, Discretionary Income, and College Costs, 1970-1981

	Median Family Income[1]			Estimated After Tax Income[2]				Discretionary Income[4]		College Costs[5]							
										Public				Private			
Year	All Families	Families With Dependents 18-24	Families With Dependents in College	All Families	Families With Dependents 18-24	Families With Dependents in College	Consumption Expenditures[3]	Families With Dependents 18-24	Families With Dependents in College	All	Univ.	Other Four Year	Two Year	All	Univ.	Other Four Year	Two Year
1970	8,268	9,624	12,063	6,176	7,189	9,011	4,840	2,309	4,171	1,287	1,477	1,206	1,018	2,738	3,163	2,599	2,103
1971	8,681	10,095	12,727	6,493	7,551	9,520	5,090	2,481	4,430	1,357	1,579	1,263	1,073	2,917	3,375	2,748	2,186
1972	9,276	10,900	13,392	6,994	8,219	10,098	5,300	2,919	4,798	1,458	1,668	1,460	1,197	3,038	3,512	2,934	2,273
1973	10,273	11,897	14,679	7,581	8,780	10,833	5,510	3,270	5,323	1,517	1,707	1,506	1,274	3,164	3,717	3,040	2,410
1974	11,025	12,561	16,005	8,026	9,144	11,652	5,670	3,474	5,982	1,563	1,760	1,558	1,339	3,403	4,076	3,156	2,591
1975	11,505	13,199	16,784	8,537	9,794	12,454	6,170	3,624	6,284	1,666	1,935	1,657	1,386	3,663	4,467	3,385	2,711
1976	12,199	14,171	18,384	8,930	10,373	13,457	6,870	3,503	6,587	1,790	2,055	1,797	1,488	3,886	4,847	3,562	2,905
1977	13,118	15,090	19,840	9,667	11,061	14,543	7,330	3,731	7,213	1,900	2,167	1,924	1,590	4,152	5,193	3,811	3,062
1978	14,300	16,910	21,429	10,339	12,226	15,493	7,700	4,526	7,793	2,009	2,286	2,025	1,685	4,479	5,604	4,123	3,344
1979	15,864	18,565	23,654	11,517	13,478	17,173	8,150	5,318	9,013	2,163	2,487	2,198	1,817	4,908	5,888	4,693	3,754
1980	16,963	19,851	25,293	12,230	14,313	18,236	8,820	5,493	9,416	2,372	2,711	2,419	2,018	5,466	6,566	5,243	4,299
1981	18,064	21,140	26,935	13,066	15,221	19,393	9,770	5,451	9,623	2,653	3,049	2,706	2,250	6,190	7,491	5,943	4,853
Percent Change	118%	120%	123%	112%	112%	115%	102%	136%	131%	106%	106%	124%	121%	126%	137%	129%	131%

Data for 1980 and 1981 are estimated

[1]Income data from the Census Bureau's October Current Population Reports which contains education-related variables. The family traditional and more comprehensive reporting of incomes is done in March of each year. The median incomes reported in October ranged from 82 to 86 percent of the median family incomes in March.

[2]Total tax burden on the median family was derived from Tax Foundation data on federal, state, local and social security taxes. A marginal tax rate was computed for each year and applied to each median income in that year.

[3]Consumption expenditures are the standard maintenance allowances published annually by the College Scholarship Service.

[4]Discretionary income equals after tax income less consumption expenditures.

[5]The National Center for Education Statistics provided the data on total student changes by type and control of institution.

Table 7

College Costs As a Percent of Discretionary Income, 1970-1981

	Families with dependents 18-24		Families with dependents 18-24 in College	
Year	Public	Private	Public	Private
1970	55.7	118.6	30.8	65.6
1971	55.1	118.5	30.6	65.8
1972	49.9	104.0	30.4	63.3
1973	46.4	96.8	28.5	59.4
1974	45.0	98.0	26.1	58.3
1975	46.0	101.0	26.5	59.0
1976	51.1	111.0	27.2	57.6
1977	51.0	111.0	26.3	57.4
1978	44.4	98.9	25.8	54.4
1979	40.6	92.3	24.0	54.4
1980	43.2	99.5	25.2	58.0
1981	48.7	113,6	27.6	64.3

Percentages derived using discretionary income and college cost figures from Table 6.

$\frac{\text{College Cost}}{\text{Disc. Income}}$ = Percentage